

Title (en)

Scratch-resistant material and method to manufacture

Title (de)

Kratzfester Werkstoff und Verfahren zu seiner Herstellung

Title (fr)

Material anti-rayures et son procédé de production

Publication

**EP 1698713 A1 20060906 (DE)**

Application

**EP 05405217 A 20050301**

Priority

EP 05405217 A 20050301

Abstract (en)

Scratch resistant material includes a Ti or steel alloy core and a hard material (HML) layer (3) on its surface (5). The core has a reinforcing zone (4) under the HML which is harder than the core and has a depth of 80 my (sic). The thickness of the HML is at least 3 my (sic) and its Vickers hardness at least 1800. An independent claim is included for a method of preparation of the scratch resistant material as described above by a CVD-process.

IPC 8 full level

**C23C 8/00** (2006.01); **C23C 14/06** (2006.01); **C23C 14/14** (2006.01); **C23C 16/26** (2006.01); **C23C 28/00** (2006.01)

CPC (source: EP)

**C23C 8/80** (2013.01); **C23C 16/0272** (2013.01); **C23C 16/27** (2013.01); **C23C 28/046** (2013.01); **C23C 28/36** (2013.01)

Citation (search report)

- [X] EP 1146136 A1 20011017 - CITIZEN WATCH CO LTD [JP]
- [X] US 6410125 B1 20020625 - BRENNER BERNDT [DE], et al
- [X] EP 1310577 A1 20030514 - HITACHI LTD [JP]
- [A] EP 1245409 A1 20021002 - CITIZEN WATCH CO LTD [JP]
- [A] US 2004038033 A1 20040226 - MASSLER ORLAW [AT], et al

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